

THE INVENTION CLAIMED IS

1. In a method for producing a film by casting a preformed solution, the improvement comprising:
casting the preformed solution using an atomizer.
2. The improvement of Claim 1, wherein using an atomizer spreads the preformed solution in a fine mist.
3. The improvement of Claim 1, wherein the casting with the atomizer is carried out at room temperature.
4. The improvement of Claim 1, wherein the casting of the preformed solution is carried out by spraying the preformed solution with the atomizer on a heated substrate.
5. The improvement of Claim 4, additionally including heating the substrate by direct heating or by blowing hot air there across.
6. The improvement of Claim 1, additionally including forming the preformed solution.
7. The improvement of Claim 6, wherein forming the preformed solution is carried out so as to include a solvent and dispersant for preventing agglomeration.
8. The improvement of Claim 7, wherein forming the preformed solution is carried out such that solvent has a high volatility and the solution has a low viscosity.
9. The improvement of Claim 7, wherein the solvent is organic.
10. The improvement of Claim 7, wherein the solvent is composed of material selected from the group consisting of ethanol, methanol and alcohol.
11. The improvement of Claim 6, wherein forming the preformed solution is carried out by:
dispersing powder to be coated in a solvent,

adding a dispersant to prevent agglomeration and adding at least one of the group consisting of plasticizers and binders.

12. The improvement of Claim 11, wherein the solvent of thus formed solution has a high volatility and solution has a low viscosity.

13. The improvement of Claim 12, wherein said solvent is organic or a mixture of organic and water.

14. The improvement of Claim 12, wherein said solvent is selected from the group consisting of ethanol, methanol and alcohol.

15. The improvement of Claim 12, wherein casting the preformed solution is carried out by the atomizer at a temperature below about 100° C.

16. The improvement of Claim 15, wherein casting of the preformed solution is carried out by the atomizer by spraying a mist of the preformed solution onto a heated substrate.

17. An aerosol spray casting method, comprising preparing a solution by:
dispersing a powder to be coated in a solvent,
adding to the solution a dispersant to prevent agglomeration, and
adding at least one of the plasticizers and binders as needed to the solution, and

depositing the solution onto a substrate to be coated using an atomizer.

18. The method of Claim 17, wherein the solvent is selected from the group consisting of ethanol and methanol.

19. The method of Claim 17, wherein depositing the solution is carried out at a temperature below about 100° C.

20. The method of Claim 17, wherein depositing the solution is carried out by spraying via the atomizer on a heated substrate.